

A NEW SPECIES OF THE GENUS *HETERANTHURA* KENSLEY (CRUSTACEA: ISOPODA: ANTHURIDAE) FROM VISAKHAPATNAM COAST¹

K. SHYAMASUNDARI, C. JALAJA KUMARI, K. HANUMANTHA RAO AND A. MARY²
(With ten text-figures)

A new species of the genus *Heteranthura* Kensley belonging to family Anthuridae is described. *Heteranthura neoanomalus* sp. nov. is compared with *H. anomala* Kensley, 1980. Three female specimens were collected from the sponge *Prostylyssa foetida* along the rocky intertidal region of Rishikonda, Visakhapatnam.

The genus *Heteranthura* was established by Kensley (1980), the characteristic features being as follows:

Eyes present, antennular flagellum 6-articulate; antennal flagellum 4-articulate. Mouth parts somewhat produced anteriorly. Mandible columnar, lacking palp, lacinia and molar. Maxilliped slender-elongate, 7-segmented, lacking endite. Pereonites 1-6 each with mid-dorsal pit. Pereopods 1-3 subchelate; pereopods 4-7 with carpus more or less rectangular, not overriding propodus. Pleonites 1-6 free, pleopod 1 rami fused, operculiform.

Heteranthura anomala was described from the Indian Ocean (along with some live coral, sponges and alcyonarians) by Kensley (1980), its salient features being the loss of a palp on the strong columnar mandible, which has also lost all trace of a lacinia or molar, maxilla also columnar and distally curved towards the mid-line, with the teeth meeting just below the mandibular cusps; maxilliped having lost the usual role of ventral shield, slender and delicate and with a few terminal setae, probably plays only a sensory role on feeding.

In the present study, some specimens of an anthurid belonging to the genus *Heteranthura* have been collected off Visakhapatnam coast, south India. Since they differ significantly from *H. anomala* Kensley, they are described as of a

new species, *Heteranthura neoanomalus*.

Heteranthura neoanomalus sp. nov.

FEMALE: Length 9 mm; breadth 2 mm.

Body elongate and narrow; integument indurate; pereonites 1, 2, 3, subequal; pereonites 1 and 4 equal; pereonite 5 slightly longer than and pereonite 6 slightly shorter than pereonite 4, pereonite 7 shortest of all. Cephalon with broadly rounded anterior margin, rostrum low and rounded.

Antennule elongate-slender, peduncle 4-articulate, articles 1 and 2 subequal, article 3 about thrice the length of the basal article, article 4 slightly longer than basal article, flagellum 4-articulate.

Antenna little longer than antennule, peduncle 3-articulate, the basal article longest. Flagellum 5-articulate.

Mouth parts, when viewed laterally, elongate and drawn out antero-dorsally beyond anterior margin of cephalon beneath shield-like upper lip.

Mandible lacking palp, strongly indurate, armed distally with 3-4 strongly and a few small sclerotized cusps. Maxilla elongate, indurate, distally strongly curved, armed with one very strong and 4 smaller spines. Maxilliped very elongate-slender, about 10 times as long as wide, 6-articulate, terminal article tiny.

Pereopod 1 unicus, 3/4 length of dactylus, propodus elongated, palm straight, unarmed except for sensory spines. Pereopods 2-7 gradually increase in length, pereopods 2-7 subsimilar.

¹Accepted March 1991.

²Department of Zoology, Andhra University, Visakhapatnam, Andhra Pradesh 530 003.

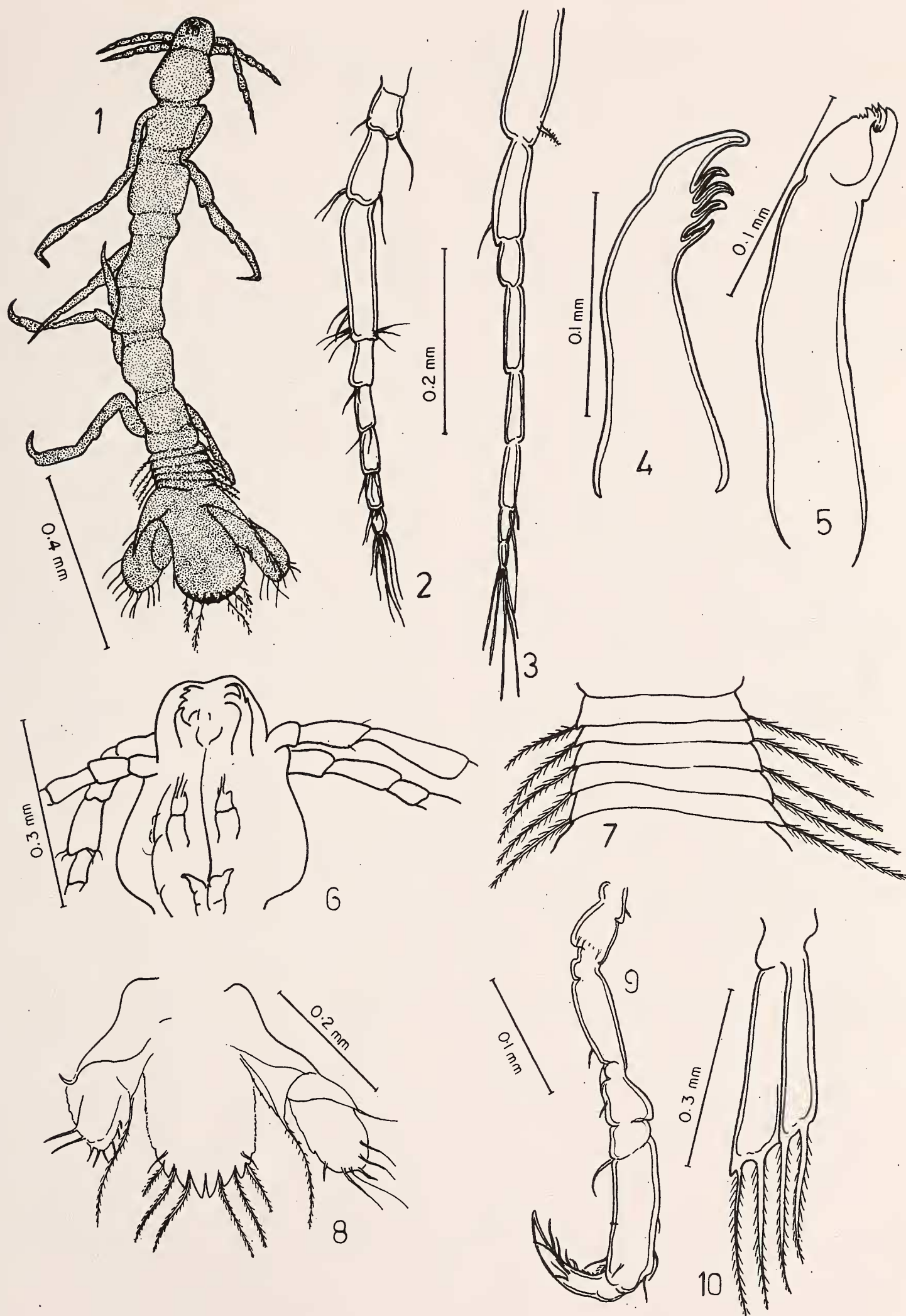


Fig. 1: *Heteranthura neoanomalus* sp. nov., Fig. 2: Antennule, Fig. 3: Antenna, Fig. 4: Mandible, Fig. 5: Maxilla, Fig. 6: Maxilliped, Fig. 7: Pleon, Fig. 8: Telson with uropods, Fig. 9: Pereopod 1, Fig. 10: Pleopod 1.

Pleonites free, subequal, each with prominent plumose seta laterally. The exopod and endopod of pleopod 1 not fused, both provided with two plumose setae each, not operculiform.

Telson shows fine serration on parallel sides, the posterior margin rounded and exhibits dentation, 8 in number, from between two consecutive ones arises a prominent plumose seta. Setae six in number, a few simple setae also present, at the mid-apical region plumose seta present.

Uropodal exopod folds dorsally over telson, bipartite consisting of elongate, spike-like, basally irregular dorsal part, and a rounded ventral part at the apex of which a very long plumose seta is given off on either side, these exceed the posterior margin of telson: endopod oval, distally rounded, margin irregular or finely serrated, extending almost to or up to posterior margin of telson.

Localities: The specimens were collected from the rocky intertidal region of Rishikonda, Visakhapatnam.

Material studied: Three female specimens were collected from the sponge *Prostylyssa foetida* along the rocky intertidal region of Rishikonda, Visakhapatnam. Holotype 1 female and paratypes 2 females are kept in the Department of Zoology, Andhra University, Waltair. They will be deposited in the collections of the Zoological Survey of India, Calcutta.

Habitat: The specimens were found in associa-

tion with the sponge *Prostylyssa foetida* along the rocky intertidal region of Rishikonda, Visakhapatnam.

DISCUSSION

Heteranthura neoanomalus sp. nov. resembles *Heteranthura anomala* Kensley, 1980 in the anteriorly produced mouth parts, and the mandible which lacks palp: the maxilla is elongated, indurate and distally strongly curved and the pleonites is provided with lateral plumose setae. Several differences can be detected, however, which separate the two species. These include the segmentation of antennules and antennae; in the number of spines for maxilla, and number of sclerotised cusps of mandible, the length of dactylus of pereopod 1 in the present form is not fused as described in *H. anomala*, and is provided only with two plumose setae each, the exopod of uropod bears a very long plumose seta, the posterior extremity of endopod is not acute and the posterior margin of telson is dented rather than serrated.

Since the differences observed are significant, a new species has been created for the specimens collected by us.

ACKNOWLEDGEMENTS

One of us (C.J.K.) is grateful to the Council of Scientific and Industrial Research for financial assistance. We are thankful to the authorities of Andhra University for providing facilities.

REFERENCES

KENSLEY, B. (1980): Anthuridean isopod crustaceans from the International Indian Ocean Expedition, 1960 -

1965 in the Smithsonian collection. *Smithson. Contrib. Zool.* 304: 1-37.